2001 CONSUMER CONFIDENCE REPORT
FOR
NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY
MAY 2001

This is your *Consumer Confidence Report* for 2001. It has been compiled from 2000 water quality data and is being provided to allow you to make personal health-based decisions regarding drinking water consumption. This report will provide you with definitions to understand the information presented. You will be provided with the sampling data for the water system and discuss the health concerns for each contaminate detected. If you have any questions concerning data presented in this report please call Jim Genke at our Water Utility Office at (732) 866-2242.

Our water is bulk purchase for distribution from New Jersey-American Water Company. They draw their water from Swimming River Reservoir for service to the Waterfront complex. The Mainside area is supplied either individually or in combination with water from the following sources: Swimming River Reservoir, Glendola Reservoir, Manasquan Reservoir, Shark River Stream and to a lesser extent from various wells feeding the New Jersey-American Water system. All sources are completely treated at either the Swimming River Water Treatment Facility and/or the Jumping Brook Water Treatment Facility.

The consumer should consider drinking water, including bottled water, originate from rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground it dissolves naturally occurring minerals and in some cases radioactive material, and can pick up substances resulting from the presence of humans and animals. It is reasonable to expect all water to contain at least small amounts of contaminants that are naturally occurring or man made. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline

Substances that may be present in wells, lakes, reservoirs, and other untreated sources include:

Microbes such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic substances such as salts and metals that can be naturally occurring or result from stormwater runoff such as from roads and parking lots, industrial or domestic wastewater discharges, oil and gas production, or farming.
Pesticides and herbicides that may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
Organic chemical substances including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come gas stations, stormwater runoff, and septic systems.
Radioactive substances that can be naturally occurring or can be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the Environmental Protection Agency prescribes regulations that limit the amount of certain substances in water provided by public water systems. Food and Drug Administration regulations establish limits for substances in bottled water that must provide the same protection for public health.

To date the Bureau of Safe Drinking Water has not completed an assessment for the system's sources of drinking water. Source water assessments will be completed for all sources of public drinking water by May 2003.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. The Mainside area received a monitoring waiver for volatile organic and synthetic organic compounds. The waivers were granted based on testing previously performed on station and because the water delivered to the station is tested for these contaminates prior to entering the distribution system

The following definitions will help you to understand the information being presented.

Maximum Contaminate Level Goal (MCLG): The level of a contaminate in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminate Level (MCL): The highest level of a contaminate that is allowed in drinking water. MCL's are set as close to the MCLGs as is feasible using the best available treatment technology.

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Treatment technique: A required process intended to reduce the level of a contaminate in drinking water.

Action Level: The concentration of a contaminate which, if exceeded, triggers treatment or other requirements which a water system must follow.

Gross Alpha Emitters: Sources for Gross Alpha Emitters are erosion of natural deposits. Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink water containing alpha emitters or Radium 226 or Radium 228 in excess of the MCL over many years may have an increased risk of cancer.

Turbidity: Sources of turbidity are soil run-off. Turbidity has no health effect. However turbidity can interfere with disinfection and provide a medium for bacterial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Barium: Sources of Barium are erosion of natural deposits. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Copper: Sources of copper are corrosion of household plumbing systems, erosion of natural deposits and leaching from wood preservatives. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short period of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their doctor.

Fluoride: Sources of fluoride are erosion of natural deposits and from a water additive that promotes strong teeth. Some people who drink water containing fluoride in excess of the MCL over many years could suffer bone disease including pain and tenderness of the bones. Children may get mottled teeth.

Sulfate: Sources of sulfate are erosion of natural deposits. High levels of sulfate may cause objectionable taste or laxative effects in intermittent water users.

Lead: Sources of lead are corrosion of household plumbing systems and erosion of natural deposits. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Nitrate: Sources of nitrate are run-off from fertilizer use, leaching from septic tanks and sewage systems and erosion of natural deposits. Infants below the age of six months who drink water containing

nitrate in excess of the MCL could become seriously ill and if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Sodium: sodium is a naturally occurring deposit. People with high blood pressure may have to limit their intake of sodium.

Total Trihalomethanes (TTHMs): Source of TTHMs is by-products of drinking water chloriation. Some people who drink water containing TTHMs in excess of the MCL over many years may experience liver, kidney or central nervous system problems and may have an increased risk of getting cancer.

Cryptosporidium: Lakes, rivers, and reservoirs may contain this tiny microbe. Each of the New Jersey-American surface water treatment facilities is operated to specifically remove and destroy this microorganism. If not removed, cryptosporidium may cause serious illness in ***immuno-compromised*** persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders; some elderly and infants can be particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the EPA Safe Drinking Water Hotline (1-800-426-4791).
New Jersey-American Water Company tests for *Cryptosporidium* on a monthly basis at each of its surface water supplies. *Cryptosporidium* was detected before treatment in the water supply at levels ranging from 0 to 397 oocysts per 100 liters of raw (untreated) water. It has never been detected in any of their treated water supplies – such as at NWS-Earle.

Special Considerations Regarding Children, Pregnant Woman, Nursing Mothers, and Others. Children may receive a slightly higher amount of a contaminate present in drinking water than adults, on a body weight basis, because they may drink a greater amount per pound of body weight than adults may. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at a lower level than other health effects or concerns. If there is insufficient toxicity information for a certain chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for uncertainties regarding these effects. In the case of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

For a full list of substances tested for at New Jersey-American Water Company, you may contact them at 1-800-NJ-AM WTR (1-800-652-6987).

The following table shows all the contaminates That where detectable in the drinking water

Contaminant	Units	Range Detected	Highest level Detected	Maximum Contaminant Level (highest level allowed)	Maximum Contaminate Level Goal (ideal goal)
Microbial Contaminates					
Total Coliform Bacteria	Percent of Positive Samples	0 to 1	1	Percent of Coliform bacteria in > 5% of Monthly Samples	0
Inorganic Chemicals					
Barium	ppm	0.5	0.5	2	2
Copper	ppm	0.9	0.9	Action level =1.3	1.3
Fluoride	ppm	ND to 0.61	0.61	4	4
Lead	ppb	11	11	Action level =15	0
Nitrate	ppb	ND to 0.7	0.7	10	10
Sodium	ppm	34	34	50	N/a
Sulfate	ppm	8 to 30	30	250	N/a
Treatment Byproducts					
Total Trihalomethanes (TTHM's)	ppb	24 to 119 (average = 65)	78	100	N/a
Turbidity					
Turbidity	ntu	0.05 to0.61	0.61	Treatment Technique	N/a
Radiological Substances					
Alpha	PCi/L	N/a	0.29 (8/98)	15	0

Radon = ND
ICR microbial data: (raw water only)
Giardia = 0 to 303/100 liters
Crytosporidium = 0 to 397/100 liters
Viruses = 0 to 1.02/100 liters

Finished Water Cryptosporidium Monitoring = ND

No Secondary MCL violations

NOTE: 99.4 percent of the turbidity readings were below the treatment technique requirement of 0.5 ntu. Turbidity is used as an indication of the performance of the surface water treatment plants in Tinton Falls and Neptune.

Where a date follows a set of results, this indicates the most recent testing done in accordance with Federal and State regulations. The State allows us to monitor for some contaminates less than once a year.

Arsenic. There is concern in the media with arsenic levels and limits in drinking water. Please note that there is no result for arsenic in the above table because arsenic was not detected in your drinking water supply.

Unregulated Contaminates:
ICR Disinfection By-Products Data (July 1997 to December 1998)

Contaminant	Units	Range Detected	Average Level Detected
Total Haloacetic Acids	Ppb	37 to 70	51
Total Haloacetonitriles	Ppb	5 to 39	16
Chloral Hydrate	Ppb	1 to13	8
Chloropicrin	Ppb	0 to 3	1
Chlorate	ppb	0.08 to 0.31	0.16
Chloite	Ppb	0 to 0.04	0.002
Bomate	Ppb	0	0
Total Haloacetic Acids (THAAs) – year 2000 data	ppb	3 to 75	21